ABSTRACT

CHOPPED INTERMEDIATE FREQUENCY WIRELESS RECEIVER

A chopped intermediate frequency (IF) wireless receiver is disclosed. The wireless receiver includes a local oscillator (LO), a first and a second mixers, an LO frequency control module, an IF filter, a digital down converter and a down conversion controller. The LO provides a local oscillating signal to the first and second mixers. The first and second mixers converts a received radio frequency signal to an in-phase IF signal and a quadrature IF signal, respectively. The LO frequency control module alternately down converts a channel frequency by changing an oscillation frequency of the LO. Coupled to the digital down converter, the down conversion controller adjusts a complex sine wave within the digital down converter while the in-phase IF signal and the quadrature IF signal are being down-converted by the digital down converter to a baseband signal.